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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,613

09/20/2005

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EXAMINER

AGHDAM, FRESHTEH N

ART UNIT

PAPER NUMBER

2611

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,613	Applicant(s) SASAKI ET AL.	
	Examiner FRESHTEH N. AGHDAM	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1, 4-5, and 6 are objected to because of the following informalities:

The subject matter of “k is a natural number of 2 or greater” should be outside parenthesis in order to be given patentable weight. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 3 includes the claimed subject matter of "said path selection section selects a sample of the same sampling number as said sample number delayed for a 1-chip time from the sample of said peak value as a path" which is inconsistent with the disclosure of invention (fig. 5), in which the path selection section does not **always select** (emphasis added) the sample point k (in this case k=4) when the oversampling rate is k (k=4, which means that each sample point is 0.25 chip time apart from the adjacent sample point). In addition, the claimed subject matter described in the specification does

not explain why the kth sample is selected by the path selector (see specification for figures 6 and 7).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 4-6 claims the subject matter of "a path selection section that selects, when **the power value** [emphasis added] compared by said comparison section increases or decreases consecutively up to the kth (k is a natural number of 2 or greater) forward or backward from **the sample having said peak value** [emphasis added], said kth sample as a path" that in addition to be a literal translation into English from a foreign document and to be replete with grammatical and idiomatic errors contains phraseologies (see above shown phrases) that lack antecedent basis, Which make the recited claims indefinite.

Claim 3 contains the subject matter of "selects a sample of **the same sampling number** as said sample number delayed for a 1-chip" that lacks antecedent basis because the sampling number that is claimed in claim 1 is different than the sampling number in claim 3 (in terms of meaning), and therefore, claim 3 does not particularly point out and distinctly claim the subject matter that applicant regards as the invention. In another words, the subject matter of claim 3 is not clear because the examiner

believes what the applicant meant by this claimed subject matter is how the examiner interpreted claim 3, which is the path selection section selects sample point k (in this case k=4) when the oversampling rate is k (k=4, which means that each sample point is 0.25 chip time apart from its adjacent sample point). At last, claim 3 appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-2 and 4-6 are rejected under 35 U.S.C. 102(a) as being anticipated by the instant application's disclosed prior art.

As to claims 1 and 4-6, the instant application's disclosed prior art teaches a path detection technique/ apparatus comprising: detecting a peak value of a delay profile created by a received signal sampled with a predetermined sampling number/ rate chip by chip (pg. 1, lines 16-26, pg. 2, lines 2-9); comparing power values between adjacent samples (e.g. first and second paths/ samples) of said delay profile (pg. 2, lines 2-9); and selecting a kth sample as a path when the compared power values increases or decreases consecutively with respect to one another up to the kth sample (e.g. comparing to the current or previous sample and selecting the higher power value

sample as a path) forward or backward from the adjacent sample having a peak value (k equals 1, pg. 2, lines 2-9).

As to claim 2, the instant application's disclosed prior art teaches a path limitation section that selects a path selected by the path selection that has a higher energy level than a threshold energy level (pg. 1, lines 27-28).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fukumoto et al (US 6,507,605) see figure 7 and column 14, lines 40-50; Araya et al (US 7,133,436) see abstract; Ohsuge (US 2001/0010703) see paragraph 68; and Matsumoto (US 2004/0047318) see figures 5-6 and 9.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRESHTEH N. AGHDAM whose telephone number is (571)272-6037. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Freshteh N Aghdam/

Examiner, Art Unit 2611

/Chieh M. Fan/

Supervisory Patent Examiner, Art Unit 2611